

WHAT IS CLAIMED IS:

1. A method of guiding a light toward a liquid crystal display panel, the method comprising:

5 receiving a first light generated from a light source;

guiding the first light to refract a first portion of the first light toward the liquid crystal display panel and to refract a second portion of the first light toward an opposite direction to transform the second portion of the first light into a second light;

reflecting the second light toward the liquid crystal display panel;

10 diffusively refracting the second light by a first amount to transform the second light into a third light;

guiding the third light to refract a third portion of the third light toward the liquid crystal display panel and to refract a fourth portion of the third light toward the opposite direction to transform the fourth portion of the third light into a fourth light;

15 reflecting the fourth light toward the liquid crystal display panel;

diffusively refracting the fourth light by a second amount to transform the fourth light into a fifth light, such that the second amount is larger than the first amount; and

refracting the fifth light toward the liquid crystal display panel.

20 2. The method for guiding light of claim 1, wherein the second light is reflected on a first region, and the fourth light is reflected on a second region, the first region being spaced apart from the light source by a first distance, the second region being spaced apart from the light source by a second distance, the second distance being larger than the first distance.

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3. A light guiding apparatus comprising:

a light incident face onto which a light generated from a light source is incident;

5 a rear face facing the light incident face;

a first side face connecting the light incident face with the rear face;

a second side face connecting the light incident face with the rear face, the second side face facing the first side face;

10 a bottom face having a plurality of prisms being disposed in parallel, a longitudinal direction of the prisms corresponding to a first direction, the prisms having a first portion and a second portion, the first portion being adjacent to the light incident face, the second portion being adjacent to the rear face, a cross-section of the first portion having a ripple-shape, a ridge of the first portion being round; and

a light exiting face facing the bottom face.

15 4. The light guiding apparatus of claim 3, wherein a cross-section of the second portion has a saw-tooth shape.

5. The light guiding apparatus of claim 3, wherein the first direction
20 forms a predetermined angle with respect to a longitudinal direction of the light source.

6. The light guiding apparatus of claim 3, wherein the first direction is
25 from the light incident face to the rear face being substantially perpendicular to a longitudinal direction of the light source.

7. The light guiding apparatus of claim 3, wherein a height of the light incident face is substantially equal to a height of the rear face.

5 8. The light guiding apparatus of claim 3, wherein a height of the light incident face is larger than a height of the rear face.

9. A lamp covering device for covering a lamp and for reflecting a light generated from the lamp toward a light incident face of a light guide plate, the lamp
10 disposed adjacent to the light incident face, the lamp covering device comprising:

a body portion facing the light incident face of the light guide plate;

a lower portion elongated from a lower end of the body portion toward a lower face of the light guide plate; and

an upper portion elongated from an upper end of the body portion toward an
15 upper face of the light guide plate, the upper portion including a covering portion for covering an upper edge adjacent to the light incident face of the light guide plate.

10. The lamp covering device of claim 9, wherein the covering portion comprises a first portion elongated from the upper portion in substantially parallel with the body portion toward the lower portion, a second portion elongated in
20 substantially parallel with the lower portion from the first portion, and a third portion elongated from the second portion to cover the upper edge adjacent to the light incident face of the light guide plate.

25 11. The lamp covering device of claim 9, wherein the covering portion

comprises a first portion elongated from the upper portion in a predetermined angle with respect to the upper portion toward the light incident face of the light guide plate, a second portion elongated from the first portion to cover the upper edge adjacent to the light incident face of the light guide plate.

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12. The lamp covering device of claim 9, wherein the lower portion is disposed under a virtual line extended from a lower surface of the light guide plate, and the lower portion further includes a first portion elongated from the lower portion toward the upper portion, and a second portion elongate in parallel with the body portion from the first portion, such that the covering member for receiving a lamp provides an increased receiving space for receiving the lamp.

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13. A back light assembly comprising:

a light source for generating a first light;

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a light guiding member including i) a light incident face onto which a light generated from a light source is incident, ii) a rear face facing the light incident face, iii) a first side face connecting the light incident face with the rear face, iv) a second side face connecting the light incident face with the rear face, the second side face facing the first side face, v) a bottom face having a plurality of prisms being disposed in parallel, a longitudinal direction of the prisms corresponding to a first direction, the first portion being adjacent to the light incident face, the second portion being adjacent to the rear face, a cross-section of the first portion having a ripple-shape, a ridge of the first portion being round, vi) a light exiting face facing the bottom face; and

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a light luminance controlling member disposed on the light guide member,

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for controlling luminance of a second light guided by the light guiding member.

14. The back light assembly of claim 13, further comprising a light reflecting member of reflecting a third light leaked from the light guiding member, the light reflection member disposed under the light guiding member.

15. The back light assembly of claim 13, further comprising a light source cover for covering the light source and for reflecting a first light generated from the light source toward a light incident face of a light guiding member, the light source disposed beside the light incident face, the light source cover comprising:

a body portion facing the light incident face of the light guide plate;

a lower portion elongated from a lower end of the body portion toward a lower face of the light guide plate; and

an upper portion elongated from an upper end of the body portion toward an upper face of the light guide plate, the upper portion including a covering portion for covering an upper edge adjacent to the light incident face of the light guide plate.

16. The back light assembly of claim 13, further comprising a light-shielding member, disposed on a portion of the light luminance controlling member, for shielding a third light exiting from the luminance controlling member, the portion being disposed adjacent to the light incidence face of the light guiding member, so that a bright line due to the light source is reduced.

17. The back light assembly of claim 13, wherein the light luminance controlling member includes a prism sheet, the prism sheet having at least one prism

formed on a lower face facing the light guiding member.

18. The back light assembly of claim 17, wherein the prisms are elongated in a second direction in which the light source is elongated.

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19. The back light assembly of claim 13, wherein the light luminance controlling member comprises:

a light-diffusion sheet for diffusing light guided by the light guiding member, the diffusion sheet disposed on the light guiding member; and

10 a light-concentration sheet for concentrating light diffused by the light-diffusion sheet, the light-concentration sheet disposed on the light-diffusion sheet, the light-concentration sheet including a light-shielding member, the light shielding member disposed on a region, the region disposed near the light incident face.

15 20. The back light assembly of claim 13, wherein the light luminance controlling member comprises:

a light-diffusion sheet for diffusing the second light guided by the light guiding member, the diffusion sheet disposed on the light guiding member;

20 a light-concentration sheet for concentrating a third light diffused by the light-diffusion sheet, the light-concentration sheet disposed on the light-diffusion sheet; and

a light-shielding member, disposed on a portion of the light-concentration sheet, the portion of the light-concentration sheet being adjacent to the light incident face.

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21. The back light assembly of claim 13, wherein the light luminance controlling member comprises:

a light-diffusion sheet for diffusing the second light guided by the light guiding member, the diffusion sheet disposed on the light guiding member;

5 a light-concentration sheet for concentrating a third light diffused by the light-diffusion sheet, the light-concentration sheet disposed on the light-diffusion sheet;

a protection sheet for protecting the light-concentration sheet, the protection sheet disposed on the light-concentration sheet; and

10 a light-shielding member, disposed on a portion of the protection sheet, for the portion of the protection sheet being adjacent to the light incident face.

22. A liquid crystal display device comprising:

a back light assembly including, (a) a light source for generating a first light, (b) a light guiding member having i) a light incident face onto which a light generated from a light source is incident, ii) a rear face facing the light incident face, iii) a first side face connecting the light incident face with the rear face, iv) a second side face connecting the light incident face with the rear face, the second side face facing the first side face, v) a bottom face having a plurality of prisms being disposed in parallel, a longitudinal direction of the prisms corresponding to a first direction, the first portion being adjacent to the light incident face, the second portion being adjacent to the rear face, a cross-section of the first portion having a ripple-shape, a ridge of the first portion being round, vi) a light exiting face facing the bottom face, (c) a light luminance control member disposed on the light guide member, for controlling luminance of a second light guided by the light guiding member; and

25 a liquid crystal display panel for displaying an image, the liquid crystal

display panel including an array substrate, a color filter substrate disposed over the array substrate and a liquid crystal layer interposed between the array substrate and the color filter substrate.

5 23. The liquid crystal display device of claim 22, wherein the liquid crystal display panel includes an active display region on which an image is displayed and a non-active display region, and the light incident face of the light guiding member being disposed in the non-active display region and being disposed close enough to the light source to reduce a bright line due to the light source.